

FIG. 1A

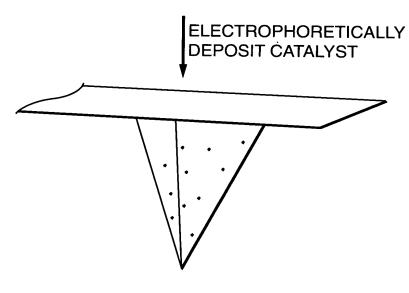


FIG. 1B

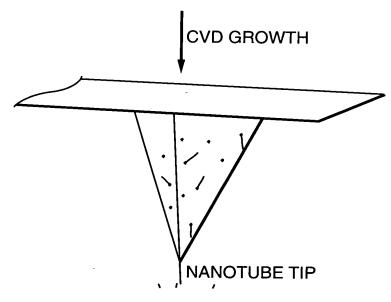


FIG. 1C

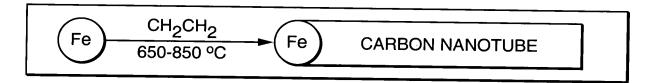


FIG. 2A

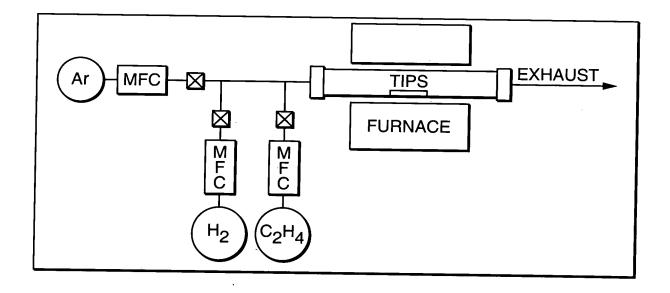
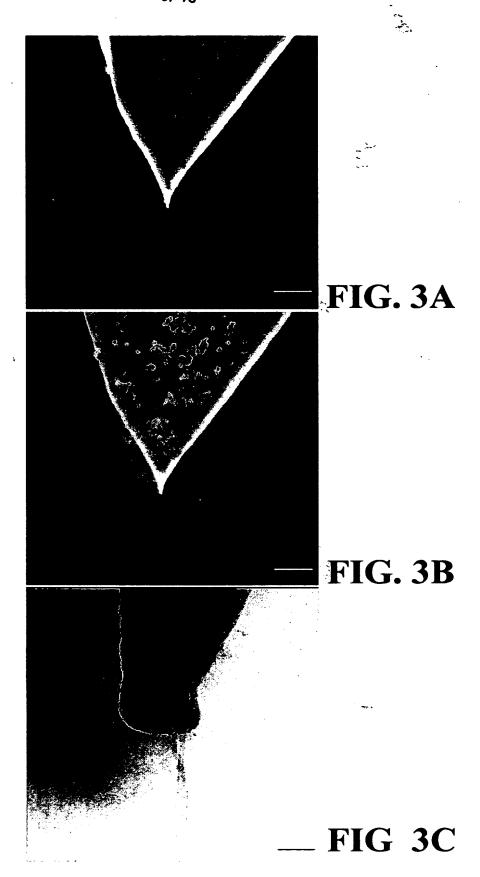


FIG. 2B

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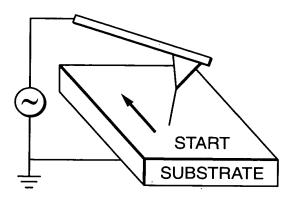


FIG. 4A

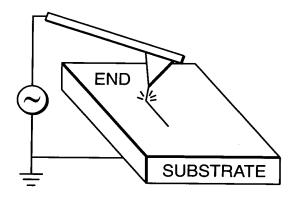


FIG. 4B

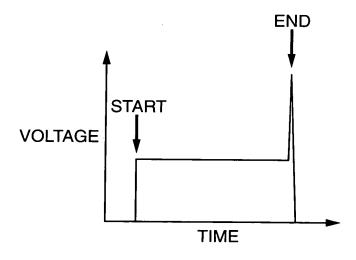


FIG. 4C

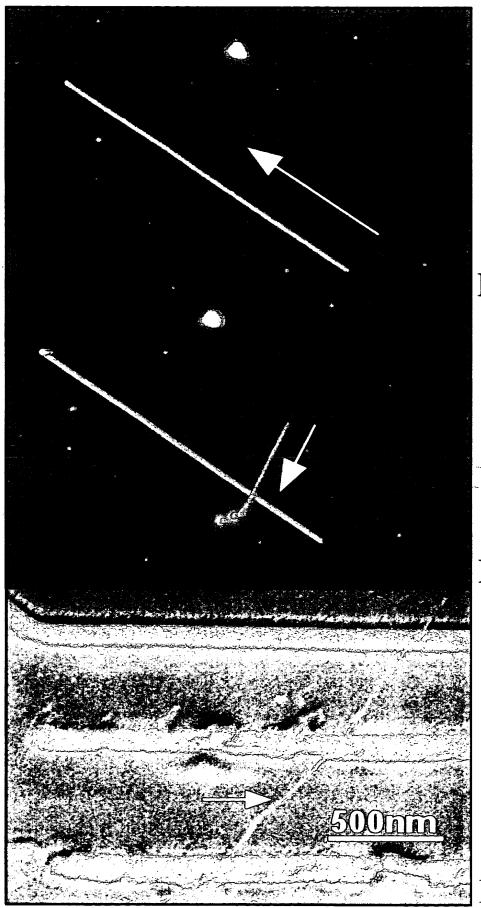


FIG. 5A

FIG. 5B

FIG. 5C

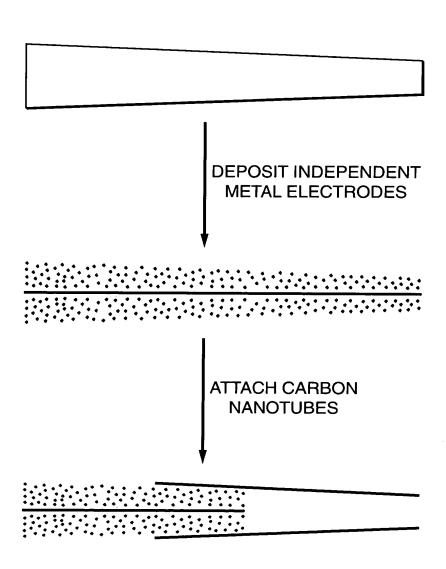
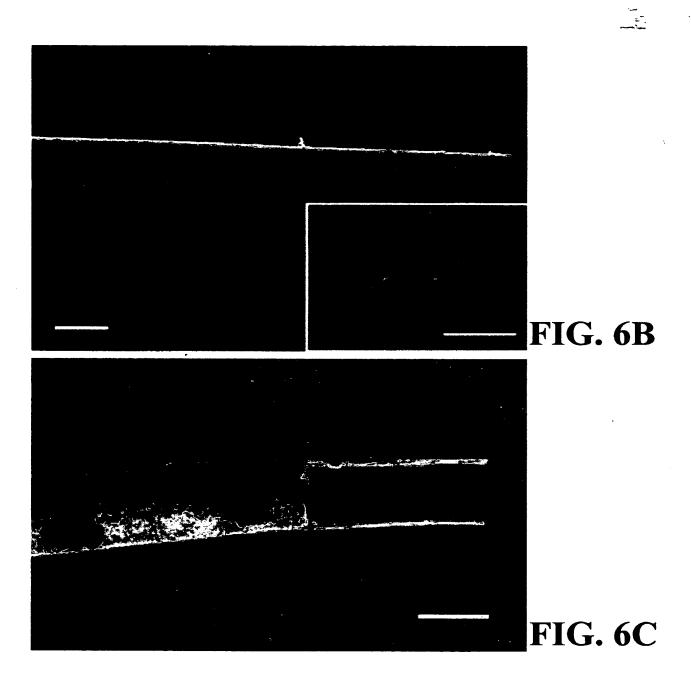
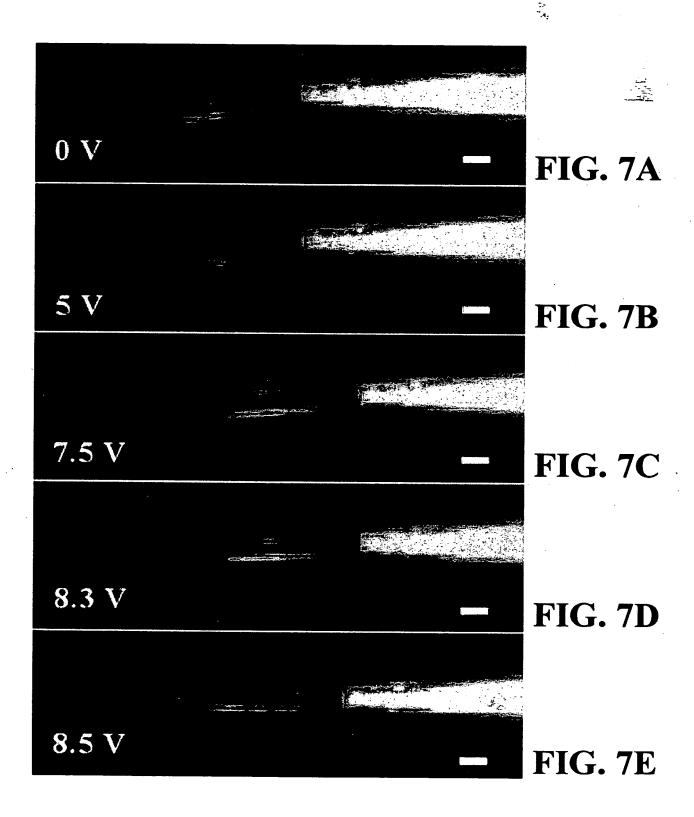


FIG. 6A





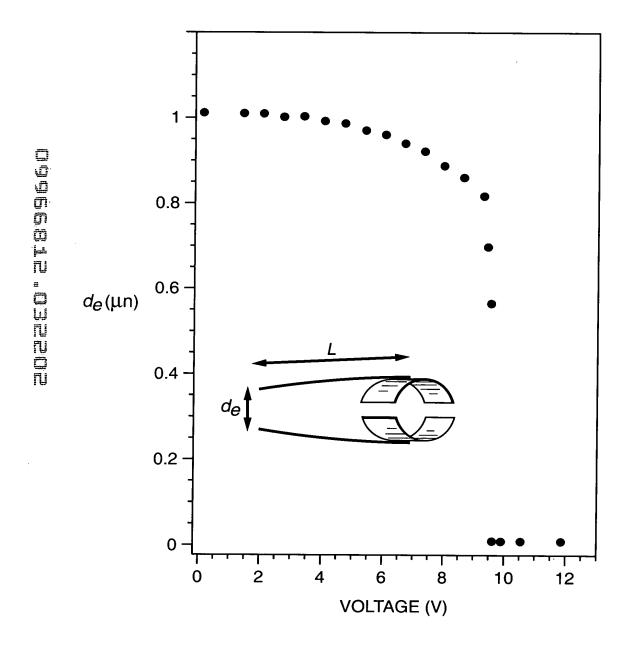
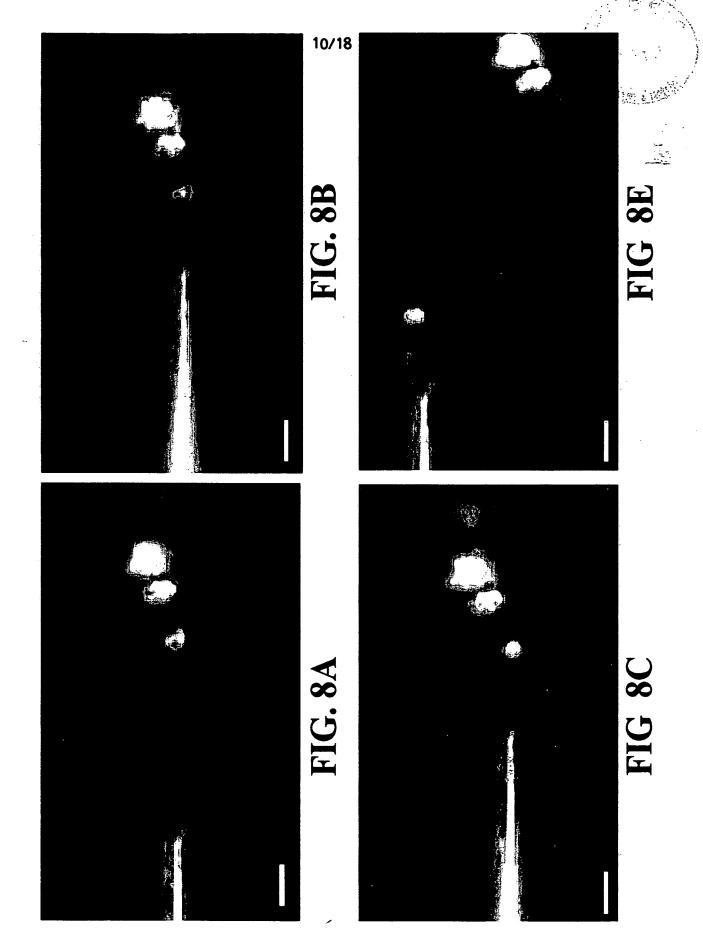
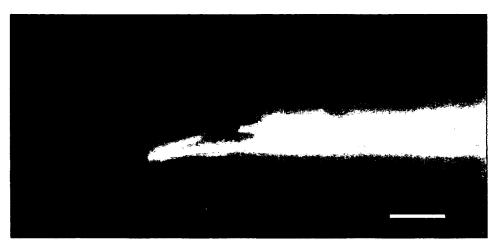


FIG. 7F





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FIG. 9A

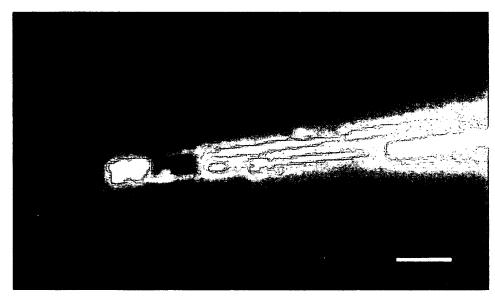


FIG. 9B

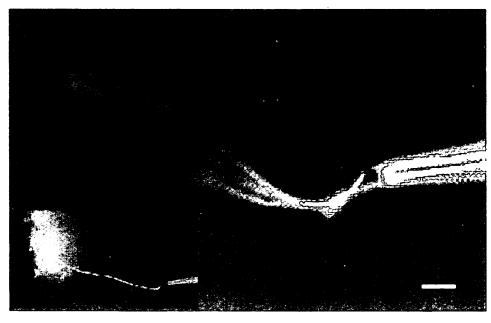


FIG 9C

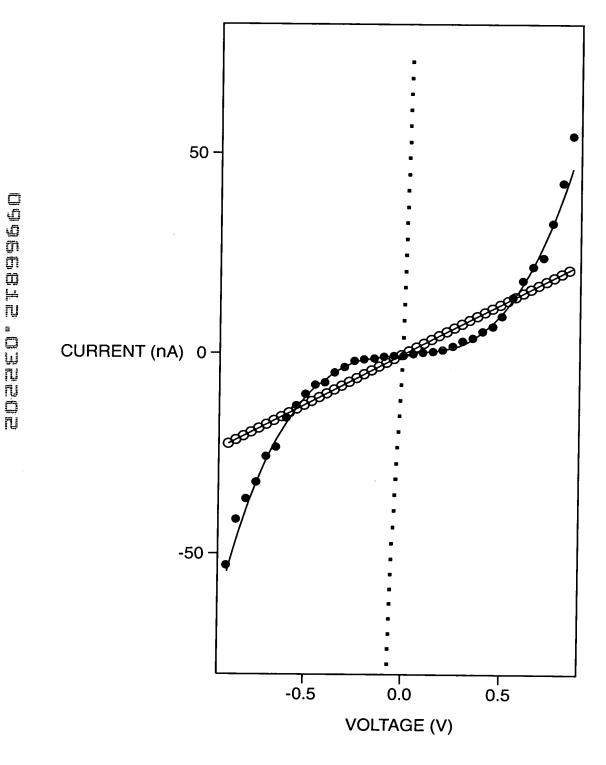
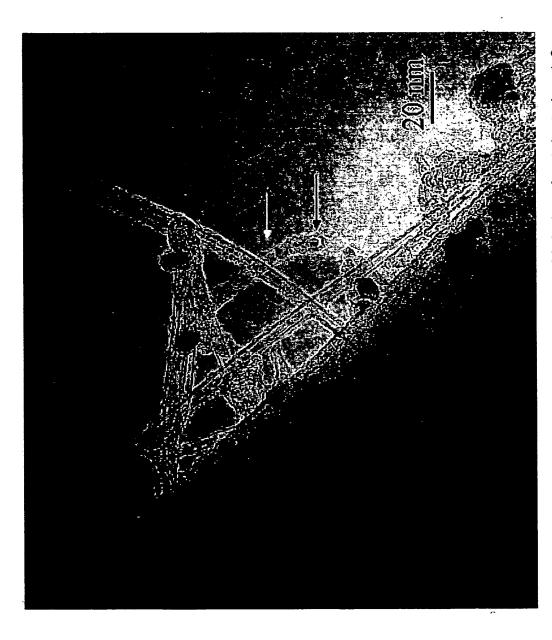
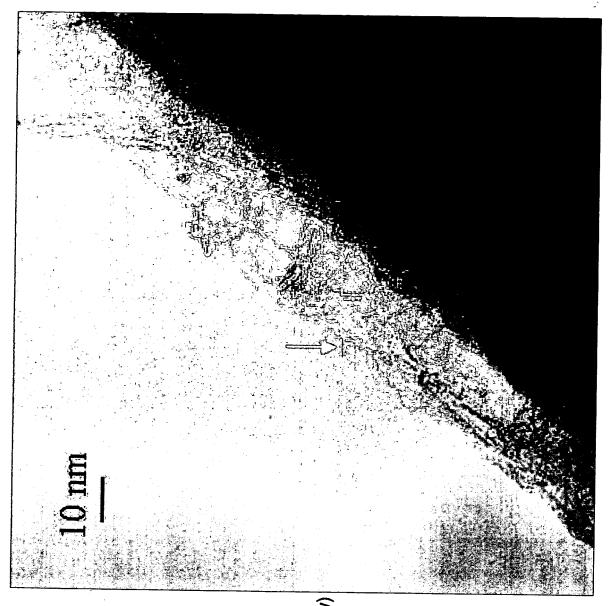


FIG. 9D



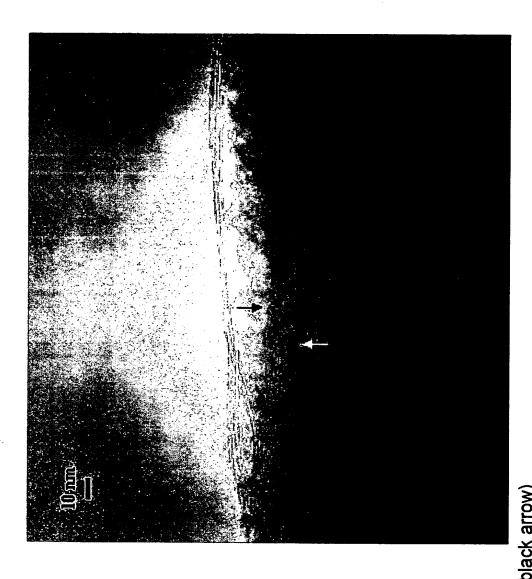
Catalyst: FeOx 6L (black arrow) Majority of catalyst size:4-6nm Carbon Source: C_2H_4 , SWNT (white arrow) Majority of SWNT size: 4nm

FIG 10



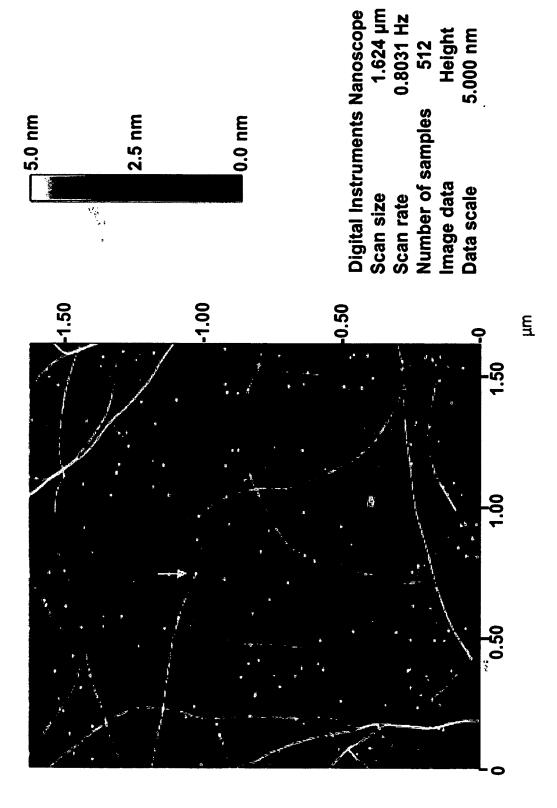
Catalyst: FeOx 2L Carbon source: CO 0.8 nm SWNT (white arrow)

FIG 11



Catalyst: FeOx 2L (black arrow)
Carbon source: CO, SWNT (white arrow)
Majority of catalyst size: 1.5-3.5 nm
Majority of nanotube size: 1.3-2.3 nm

FIG. 12



Catalyst: FeOx 6L(white arrow) Carbon source: C₂H₄, SWNT (black arrow)

FIG 13

DOOSSED DEFECT

15.987 nm 15.862 nm 1.609 nm 5.791 deg HORIZ. DISTANCE (L) SURFACE DISTANCE SURFACE DISTANCE HORIZ. DISTANCE SURFACE DISTANCE HORIZ. DISTANCE **VERT. DISTANCE VERT. DISTANCE** ANGLE ANGLE

SPECTRUM

FIG. 14A

VERT. DISTANCE ANGLE

0 Hz 0.00006 nm SPECTRAL RMS amp SPECTRAL PERIOD SPECTRAL FREQ.

FIG. 14C

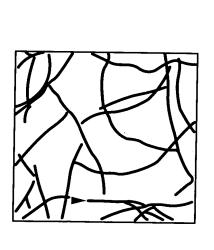
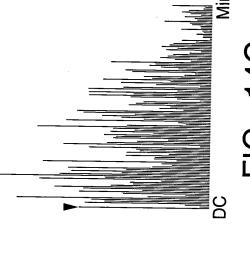


FIG. 14B



OPPOSIE CIEDE